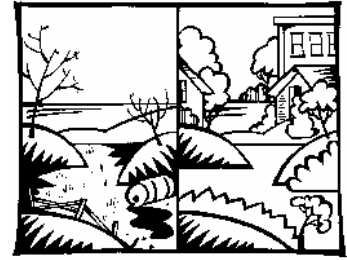


Fact Sheet

A History of the Ashland/Northern States Power Lakefront Site

February 2005 RR-645



Introduction

The Ashland/Northern States Power Lakefront site is made up of several properties within the city of Ashland, Wisconsin, and about 10 acres of sediment and surface water in Chequamegon Bay.

These properties include parcels owned by Northern States Power Company of Wisconsin, (referred to as NSP-Wisconsin, doing business as Xcel Energy), Canadian National Railroad (formerly Wisconsin Central Limited Railroad), and the city of Ashland, including Kreher Park and the former wastewater treatment plant. Portions of the sediment and surface water of Chequamegon Bay are also part of the site.

The site's boundaries include U.S. Highway 2 to the south, Prentice Avenue to the east, Ellis Avenue to the west and Chequamegon Bay to the north. Contaminated groundwater exists under these properties, as well as under portions of nearby Our Lady of the Lake Catholic Church and School, and residences on St. Claire Street between Prentice and 3rd Avenue.

Site History

Prior to the 1880s, the Chequamegon Bay shoreline was located near what is now the Canadian National Railroad rail corridor. The city-owned property, including the area now known as Kreher Park, was created in the late 1800s and early 1900s by the placement of various fill materials into Chequamegon Bay.

The eastern portion was filled with sawdust, wood waste and other materials from sawmills that operated in the area from the early 1880s until about 1932. The western part was filled primarily with wood, demolition waste and other waste material from the Ashland area.

From the 1880s through 1947, a manufactured gas plant produced gas for area homes,

businesses and street lighting on property now owned by NSP-Wisconsin. A ravine ran through the property, emptying out near the former shoreline to the north (the approximate location of the railroad tracks). Historical maps show that the ravine was open at the start-up of gas production in the late 1800s and was filled by the early 1900s. Investigations have shown that the fill material includes cinders ash, boiler slag, demolition debris and soil.

Contamination

Groundwater, sediment and soil are contaminated with waste, including tar, oil and other waste consisting of poly-aromatic hydrocarbons (PAHs), volatile organic compounds (VOCs) and metals.

Much of the fill and groundwater underlying portions of Kreher Park is contaminated with the same waste as the filled ravine area, including "free product." Free product refers to contamination present in the environment as a separate floating or sinking mass that does not readily mix with or dissolve in water. Contamination has been found to a depth of 70 feet within the Copper Falls aquifer, a water-bearing formation made up of layers of sand and gravel.

Contaminated sediment within Chequamegon Bay is located directly off shore and bounded to the east and west by historic docks that act as breakwaters. The dock structure to the west has been developed into a marina, and the city operates a boat landing to the east.

Sediment in this area contains PAHs, VOCs, and oil and tar as free product consistent with contamination at the rest of the site. Contamination exists mainly within the sediment; however, if the sediment is agitated, oil and tar can be released to the water column and surface, causing a slick to form.



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To avoid such disturbances, access to this portion of the affected bay has been restricted since 1997 via navigational buoys.

Environmental Investigations and State, Federal Involvement

Contamination at the site was discovered in the late 1980s when workers were excavating a trench for a sewer line. Subsequent investigations carried out by the city determined widespread VOC and PAH contamination on its property.

In 1993, the Wisconsin Department of Natural Resources (DNR) began investigating the contamination found on the city property using state-funded cleanup dollars. These investigations concluded that at least some of the contaminants appeared to be the same as that associated with industries that once operated in this area, including the manufactured gas plant.

Beginning in 1994, NSP-Wisconsin, DNR and the U.S. Environmental Protection Agency (EPA) have carried out or overseen investigations of soil, groundwater and sediment, as well as studied associated risks with the lake environment. The Department of Health and Family Services (DHFS) has completed assessments of potential health risks to people living near the site.

In 1999, a citizen's petition requested that EPA assess the site and determine if it should be listed on the federal Superfund National Priorities List (NPL). The site was proposed for listing in December 2000, underwent a public comment period, and was placed on the NPL in September 2002. In November 2003, NSP-Wisconsin voluntarily entered into an agreement with EPA to complete the investigations under EPA and DNR oversight in order to recommend a final cleanup option.

While this work was underway, NSP-Wisconsin continued to monitor groundwater and conducted two interim cleanups. Interim cleanups are conducted before a remedy is selected for the entire site. In 2000, the company installed an extraction system to begin to pump out and treat tar from the Copper Falls aquifer located under the site. A second cleanup occurred in 2002, when the company excavated and disposed of contaminated soil from a small area near the mouth of the historical ravine (also known as the seep). The excavated soil was replaced with

clean top soil. In addition, the city rerouted storm sewers to stop storm water from discharging onto the site.

Since the 2002 NPL listing, NSP-Wisconsin conducted field work, including installation of groundwater monitoring wells in the upper bluff area and at Kreher Park, and tissue sampling of smelt. In addition, DNR and EPA prepared a community involvement plan that outlines how residents will be kept involved and informed as work continues at the site.

Next Steps

As a result of the agreement signed in 2003, NSP-Wisconsin will soon start field work to complete the investigation of the site. Information gained will be used to develop cleanup options. The work, documented in a workplan approved by EPA in December 2004, calls for additional sampling of soil, sediment, air and groundwater. The EPA and DNR will oversee the field work, which is expected to be complete in the summer of 2005.

A final report on the site, called a Remedial Investigation/Feasibility Study, is scheduled to be delivered for agency review in 2006. This report will tie together all field investigations performed to date, assess the risk to human health and the environment from site contaminants, and evaluate possible cleanup options. Once the report is approved, EPA will release a proposed cleanup plan for public review and comments.

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